Training and Evaluation Outline Report

Status: Approved 29 Dec 2014 Effective Date: 13 Oct 2016

Task Number: 05-BN-0725

Task Title: Modify a Standard Construction Design

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD1 - This training product has been reviewed by the training developers in coordination with the Fort Leonard Wood, MO MSCoE foreign disclosure officer. This training product can be used to instruct international military students from all approved countries without

restrictions.

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	ATP 5-19 (Change 001 09/08/2014 78 Pages)	RISK MANAGEMENT http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/atp5_19.pdf	Yes	No
	TM 5-303	ARMY FACILITIES COMPONENTS SYSTEM - LOGISTIC DATA AND BILLS OF MATERIEL	Yes	Yes
	TM 5-304	ARMY FACILITIES COMPONENTS SYSTEM USER GUIDE	Yes	No
	TM 5-704	Construction Print Reading in the Field. AFM 85-27.	Yes	No

Conditions: The battalion has been assigned a construction mission that requires modifying a standard construction design to meet existing conditions.

Note: The Commander must still determine at what level of training they would want the element to perform. Crawl, walk or run. This can only be determined after consideration as to the units training level.

The Commander prior to evaluating an element in the conduct of the task must determine if it will be conducted in a Live, Virtual, or Constructive environment, additionally it must also be determined which condition as described below that the element will conduct the task. The selection made for this task is at a trained level of proficiency. The commander must determine which of the environments below will best suit the unit and the proficiency level at which the unit is. When conducting crawl or walk level training units should not increase the intensity until the unit has achieved the standards and then unit trainers should include variables that increase proficiency in all conditions.

Note: The condition statement for this task is written assuming the highest training conditions reflected on the Task Proficiency matrix required for the evaluated unit to receive a "fully trained" (T) rating.

Note: Condition terms definitions:

Dynamic Operational Environment: Three or more operational and two or more mission variables change during the execution of the assessed task. Operational variables and threat Tactics, Techniques, and Procedures (TTPs) for assigned counter-tasks change in response to the execution of Blue Forces (BLUFOR) tasks.

Complex Operational Environment: Changes to four or more operational variables impact the chosen friendly COA/mission. Brigade and higher units require all eight operational variables of Political, Military, Economic, Social, Infrastructure, Information, Physical environment, and Time (PMESII-PT) to be replicated in varying degrees based on the task being trained.

Single threat: Regular, irregular, criminal or terrorist forces are present.

Hybrid threat: Diverse and dynamic combination of regular forces, irregular forces, and/or criminal elements all unified to achieve mutually benefiting effects. This task should not be trained in MOPP 4.

Standards: The battalion modifies the drawings and specifications of a standard design, producing structures that are safe and fulfill their designed purpose within the existing constraints and conditions. If necessary, the battalion Operations and Training (S3) Construction Section issues a construction change directive to subordinate companies.

Leaders are defined as the Commander, Deputy Commander, Command Sergeant Major, Master Sergeant, Battle Captain, Operations Sergeant, Section Sergeants, Commanders of assigned/attached units (battalions and companies), S-1, S-2, S-3, S-4, Engineer Officer, Public Affairs Officer, S-6, Command Judge Advocate.

Live Fire Required: No

Objective Task Evaluation Criteria Matrix:

Pla	an a	and Prepare		E	xe	cute			Assess
Operationa Environmen	al nt	Training Environment (L/V/C)	% of Leaders Present at Training/Authorized	% of Soldiers Present at	External Eval	% Performance Measures 'GO'	% Critical Performance Measures 'GO'	% Leader Performance Measures 'GO'	Task Assessment
CO & BN		ng ment C)	iders it at thorized	diers nt at	Eval	nance s 'GO'	cal ance s 'GO'	der ance s 'GO'	ssment
Dynamic and Complex (4+ OE Variables	>=85%	2004	Yes	>=91%		>=90%	т		
OE Variables and Hybrid Threat)	Night	IAV	75-84%	>=80%	es	80-90%	All	00.000/	T-
Dynamic		IAW unit CATS statement.	65-74%	75-79%		65-79%		80-89%	Р
(Śingle Threat)	Day	ant.	60-64%	60-74%	No	51-64%		700/	P-
Static (Single Threat)	зу		<=59%	<=59%		<=50%	<all< td=""><td><=79%</td><td>U</td></all<>	<=79%	U

Remarks: None
Notes: None
Safety Risk: Low

Task Statements

DANGER

Leaders have an inherent responsibility to conduct Risk Management to ensure the safety of all Soldiers and promote mission accomplishment.

WARNING

Risk management is the Army's primary decision-making process to identify hazards, reduce risk, and prevent both accidental and tactical loss. All Soldiers have the responsibility to learn and understand the risks associated with this task.

CAUTION

Identifying hazards and controlling risks across the full spectrum of Army functions, operations and activities is the responsibility of all Soldiers.

Performance Steps and Measures

NOTE: Assess task proficiency using the task evaluation criteria matrix.

NOTE: Asterisks (*) indicate leader steps; plus signs (+) indicate critical steps.

STEP/MEASURE	GO	NO-GO	N/A
+ 1. The Operations and Training Officer (U.S. Army) (S3) construction section prepares drawings and specifications by modifying a standard construction design.			
a. Selects the applicable standard construction design.			
b. Reflects dimensions in the revised design using U.S. measurements (as opposed to metric).			
c. Verifies compatibility of local materials with the design.			
+ d. Maintains structural integrity of the designed project:			
(1) Does not move or remove load-bearing columns or walls.			
(2) Does not add additional loads without increasing the strength of supporting members of the structure.			
e. Incorporates local construction materials, codes, and specifications as required.			
f. Reduces or increases the standard design, as necessary.			
g. Bases adaptations to standard construction designs on current references, technical publications, industry and safety standards.			
+ 2. The S3 construction section maximizes the use of existing roads, utilities, and facilities as they modify the standard design.			
3. The S3 construction section maintains quality control throughout the preparation of the drawings and specifications.			
+ 4. The S3 construction section edits the bill of materials for the proposed structure as required.			
+ 5. The S3 construction section confirms funding availability to execute the modified design, if applicable.			
+ 6. The S3 construction section issues construction change directives to subordinate companies, as required.			
+ 7. The battalion submits status reports as prescribed in the unit standing operating procedure (SOP).			

TASK PERFORMANCE / EVALUATION SUMMARY BLOCK							
ITERATION 1 2 3 4 5 M TOTAL							
TOTAL PERFORMANCE MEASURES EVALUATED							
TOTAL PERFORMANCE MEASURES GO							
TRAINING STATUS GO/NO-GO							

ITERATION: 1 2 3 4 5 M

COMMANDER/LEADER ASSESSMENT: T P U

Mission(s) supported: None

MOPP 4: Never

MOPP 4 Statement: None

NVG: Never

NVG Statement: None

Prerequisite Collective Task(s): None

Supporting Collective Task(s):

Step Number	Task Number	Title	Proponent	Status
6.	05-BDE-0718	Issue a Construction Directive	05 - Engineers (Collective)	Approved
7.	05-CO-0018	Conduct Report Procedures	05 - Engineers (Collective)	Approved

OPFOR Task(s):

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Task Number	Title	Status
71-CO-8502	OPFOR Execute an Ambush	Approved
71-CO-8504	OPFOR Execute a Reconnaissance Attack	Approved

Supporting Individual Task(s):

Step Number	Task Number	Title	Proponent	Status
	052-12T-1236	Prepare a Foundation Drawing	052 - Engineer (Individual)	Approved
	052-12T-3400	Determine Requirements to Site Adapt a Standard Army Facilities Component System (AFCS) Drawing	052 - Engineer (Individual)	Approved
	052-210-1122	Coordinate with Supported Units	052 - Engineer (Individual)	Approved
	052-210-1204	Review a Foundation Plan Drawing	052 - Engineer (Individual)	Approved
	052-210-1206	Review a Building Elevation Drawing	052 - Engineer (Individual)	Approved
	052-210-1208	Review a Sectional View Drawing	052 - Engineer (Individual)	Approved
	052-210-1210	Review a Detail Drawing	052 - Engineer (Individual)	Approved
	052-210-1212	Review a Utility Plan/Drawing	052 - Engineer (Individual)	Approved
	052-210-1213	Manage Traverse Survey	052 - Engineer (Individual)	Approved
	052-210-1215	Manage Site Plan Preparations for Vertical Construction	052 - Engineer (Individual)	Approved
	052-210-1231	Determine Design of Concrete Mix	052 - Engineer (Individual)	Approved
	052-210-1244	Design Specification Proposals for a Vertical- Construction Project	052 - Engineer (Individual)	Approved
	052-210-1247	Design Specification Proposals for a Horizontal- Construction Project	052 - Engineer (Individual)	Approved
	052-210-1248	Manage Geodetic Survey with Instrumentation	052 - Engineer (Individual)	Approved
	052-210-1250	Manage Real-Time Kinematic (RTK) Survey with DGPS	052 - Engineer (Individual)	Approved
	052-210-1251	Manage Post Processing Technique Kinematic (PPRTK) Survey with DGPS	052 - Engineer (Individual)	Approved
	052-243-1235	Prepare a Floor Plan Drawing	052 - Engineer (Individual)	Approved
	052-243-1237	Prepare a Building Elevation Drawing	052 - Engineer (Individual)	Approved
	052-243-1239	Prepare a Sectional-View Drawing	052 - Engineer (Individual)	Approved
	052-243-1240	Prepare a Detail Drawing	052 - Engineer (Individual)	Approved
	052-243-1241	Prepare a Utility Plan/Drawing	052 - Engineer (Individual)	Approved
	052-243-1248	Perform a Traverse Survey	052 - Engineer (Individual)	Approved
	052-243-1302	Modify a Standard Army Facilities Component System (AFCS) Drawing	052 - Engineer (Individual)	Approved
	052-243-1532	Prepare Preliminary Drafting Sketches	052 - Engineer (Individual)	Approved
	052-243-1540	Perform Real Time Kinematic (RTK) Survey with Differential Global Positioning System (DGPS)	052 - Engineer (Individual)	Approved
	052-243-1541	Produce Civil Engineering Drawings	052 - Engineer (Individual)	Approved
	052-243-1562	Prepare a Site Plan for General Construction	052 - Engineer (Individual)	Approved
	052-243-1601	Perform a Preliminary Site Survey (Topographic/Radial Survey) with a Total Station Survey Instrument	052 - Engineer (Individual)	Approved
	052-243-1607	Prepare a Plot Plan for General Construction	052 - Engineer (Individual)	Approved
	052-243-2201	Check Drawings and Sketches	052 - Engineer (Individual)	Approved
	052-306-7103	Employ Project Management Techniques	052 - Engineer (Individual)	Approved

Supporting Drill(s): None

Supported AUTL/UJTL Task(s):

Task ID	Title
ART 4.1.7.3	Provide Technical Engineer Support

TADSS

TADSS ID	Title	Product Type	Quantity
No TADSS specified			

Equipment (LIN)

LIN	Nomenclature	Qty
No equipment specified		

Materiel Items (NSN)

NSN	LIN	Title	Qty
No materiel items specified			

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to the current Environmental Considerations manual and the current GTA Environmental-related Risk Assessment card.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.